SIEMENS

MAMMOMAT *Novation*^{DR}

SP

Planning Guide

Opdima

for MAMMOMAT *Novation*^{DR} with WH AWS

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Document revision level

The document corresponds to the version/revision level effective at the time of system delivery.

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General Notes

- With distribution of these revision level, all preceding planning guides, Speed Infos (PGs) and drafts lose their validity.

- All layouts issued by the Planning Departments must bear a note referring to the installation and delivery conditions of Siemens Medical Engineering. The installation and delivery conditions must be submitted with the layouts.

- Unless otherwise specified, all dimensions are indicated in "mm".

⧫ - The symbol indicates a change (see revision status).

- Orientation points
  Points specific to system components to which reference is made when positioning system components to each other or in the room.
  The isocenter of a radiographic system is always illustrated as the orientation point.

- Fixpoints
  Clearly marked points on system components, installation ceiling, walls or floor on which cable outlets are located.
  Illustration in the drawings: octagon with letter/number-combination.
  The cable lengths specify the maximum fixpoint distances and thus the maximum distances between the individual system components.

- Room height
  The room height is the distance measured from the top surface of the floor to the bottom surface of the ceiling structural elements (Unistrut rails) (bottom surface of drop ceiling).

- Room lighting
  According to DIN 68 68-57 (international standard in preparation), the lighting in rooms in which image playback devices (monitors) are used for diagnosis, the following requirements must be met:

  adjustable, no anti-glare screen, reproducible adjustment of the lighting (e.g. dimmer with scale),

  no glare or reflection from windows, lights and light boxes in the standard working position of the monitors.

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Safety

- The provisions of the relevant fire safety regulations must be observed for the premises.

- The system has been developed according to EN 60601 - 1.

- Minimum dimensions (e.g. room heights, safety distances) indicated in the planning guides are marked "min."

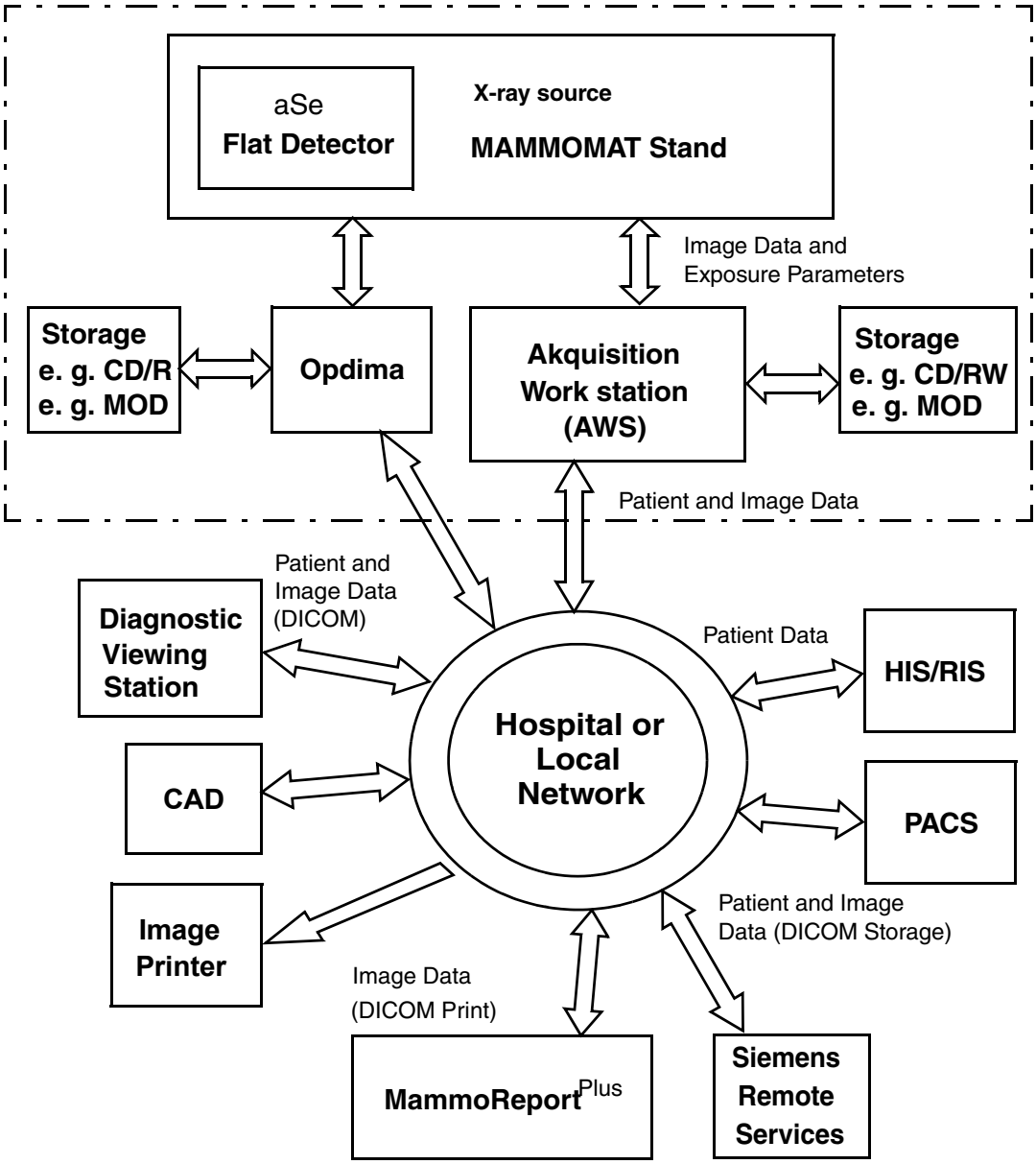
- Basic strength against electromagnetic sources of interference.
  Result of lightning discharges.
  The protection targets of the different lightning protection areas up to the unit connection are also specified in the IEC 1024, DIN 48810, VDE 0675 and in the DEMVT recommendations.

Further Information for Detail Planning

- PG: MAMMOMAT *Novation*^{DR} with WH AWS, SPB7-250.891.02...

MAMMOMAT *Novation*^{DR}

Overview of the MAMMOMAT system



Network

The Opdima Acquisition Workstation supports the TCP/IP protocol. Because of the required data flow, we recommend a network with 100 MB/s. Please make sure that all required network cables as well as the required network connectors are available on site. If needed, an external service contractor may be brought on site.

Software Installation

The Opdima system is shipped with the software already installed.

DICOM (option), Checklist;

- A RJ-45 network connector is needed.
- If the distance between the Opdima workstation and the network connector is longer than 3.5 m (3.5 m cable included in the package), a UTP-5 cable of maximum 50 m is needed.
- The license key to enable the DICOM (option). is delivered on a separate sheet in the packaging of the Optima.

- The Opdima system needs the following information to be connected to the network:

IP address: (e.g. 111.121.131.141)
Netmask: (e.g. 111.121.131.141)
Default router: (e.g. 111.121.131.141)

For further information see *DICOM Conformance Statement* for Opdima ASW 3.0/3.1 which is available on the Intranet.

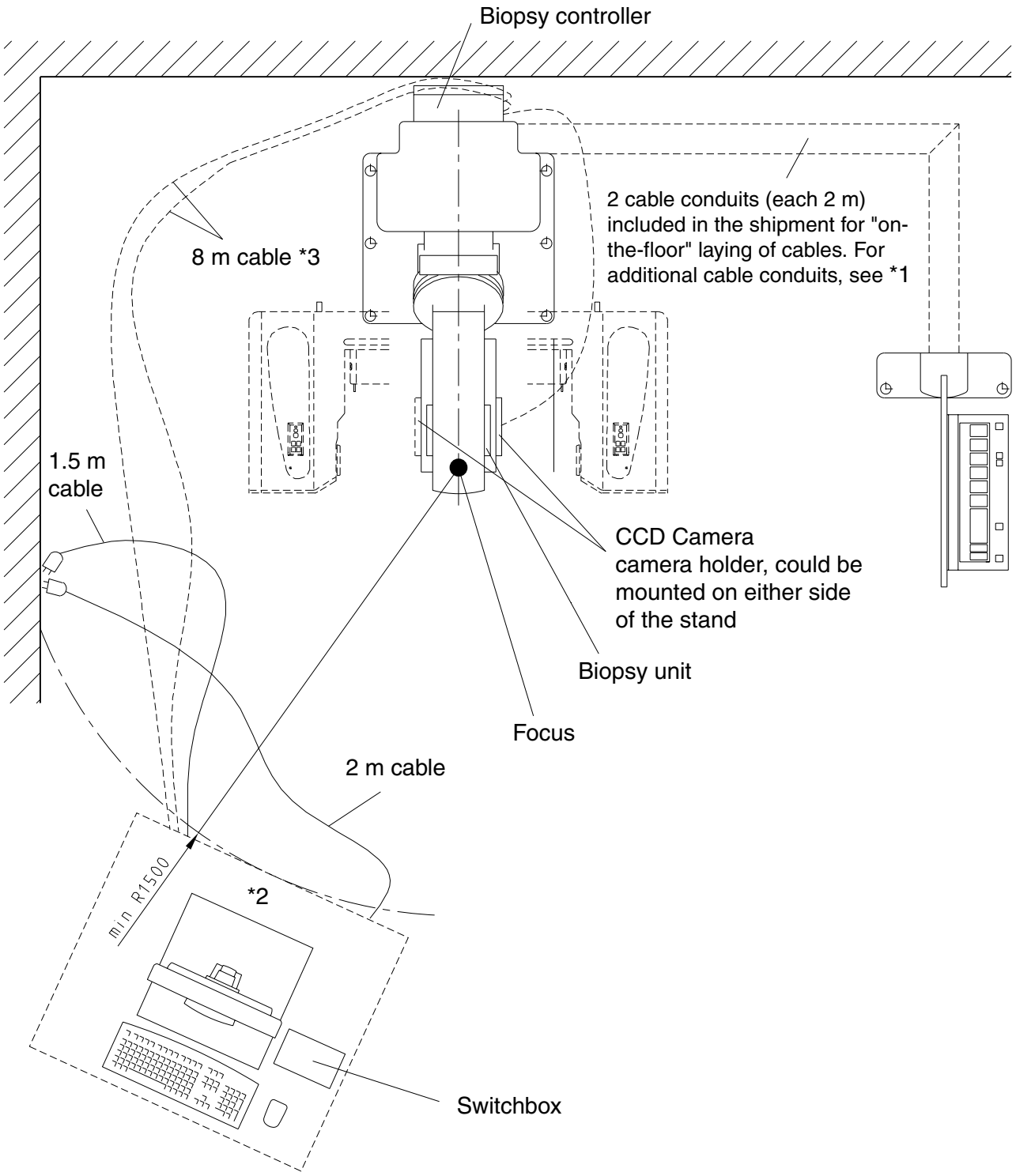
- Network information about the DICOM nodes which will be connected to the Opdima system. The following information for all DICOM nodes is necessary:

Host name: (e.g. opdXXXX)
IP address: (e.g. 111.121.131.141)
DICOM Port: 1984 for Opdima
DICOM AET: (e.g. opdXXXX_SRV)

NOTE	**XXXX is the serial no. of the workstation. The serial no. appears on a label on the cover of the main unit (last four digits). The last four digits of the host name comprise the last four digits of the serial no.**

NOTE	**The host name, DICOM Port and DICOM AET parameters are fixed.**

Room Planning Example


Biopsy controller
2 cable conduits (each 2 m) included in the shipment for "on-the-floor" laying of cables. For additional cable conduits, see *1
8 m cable *3
1.5 m cable
CCD Camera
camera holder, could be mounted on either side of the stand
Biopsy unit
Focus
2 m cable
min R1500
*2
Switchbox

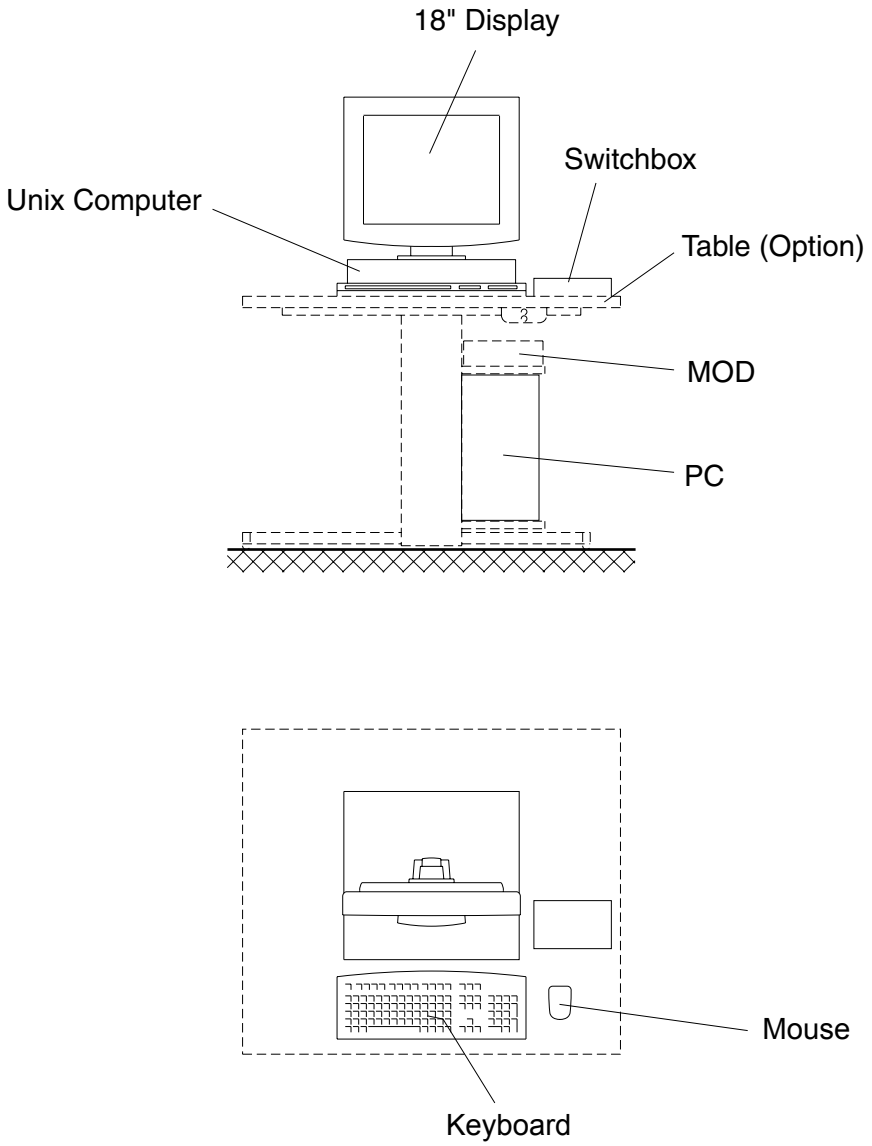
*1 If needed, additional cable conduits, Part No. 011 85 599, can be ordered for the connection between the stand and the radiation shield.

*2 For safety reasons, the acquisition workstation must be set up outside the area, per IEC 60601-1-1.

*3 Lay the cables in suitable cable conduits.

Version 1:
Novation Acquisition Workstation (WH AWS) + Opdima

comprised of: 18" color display, Unix computer, keyboard, mouse, PC, switchbox and MOD



1 : 20

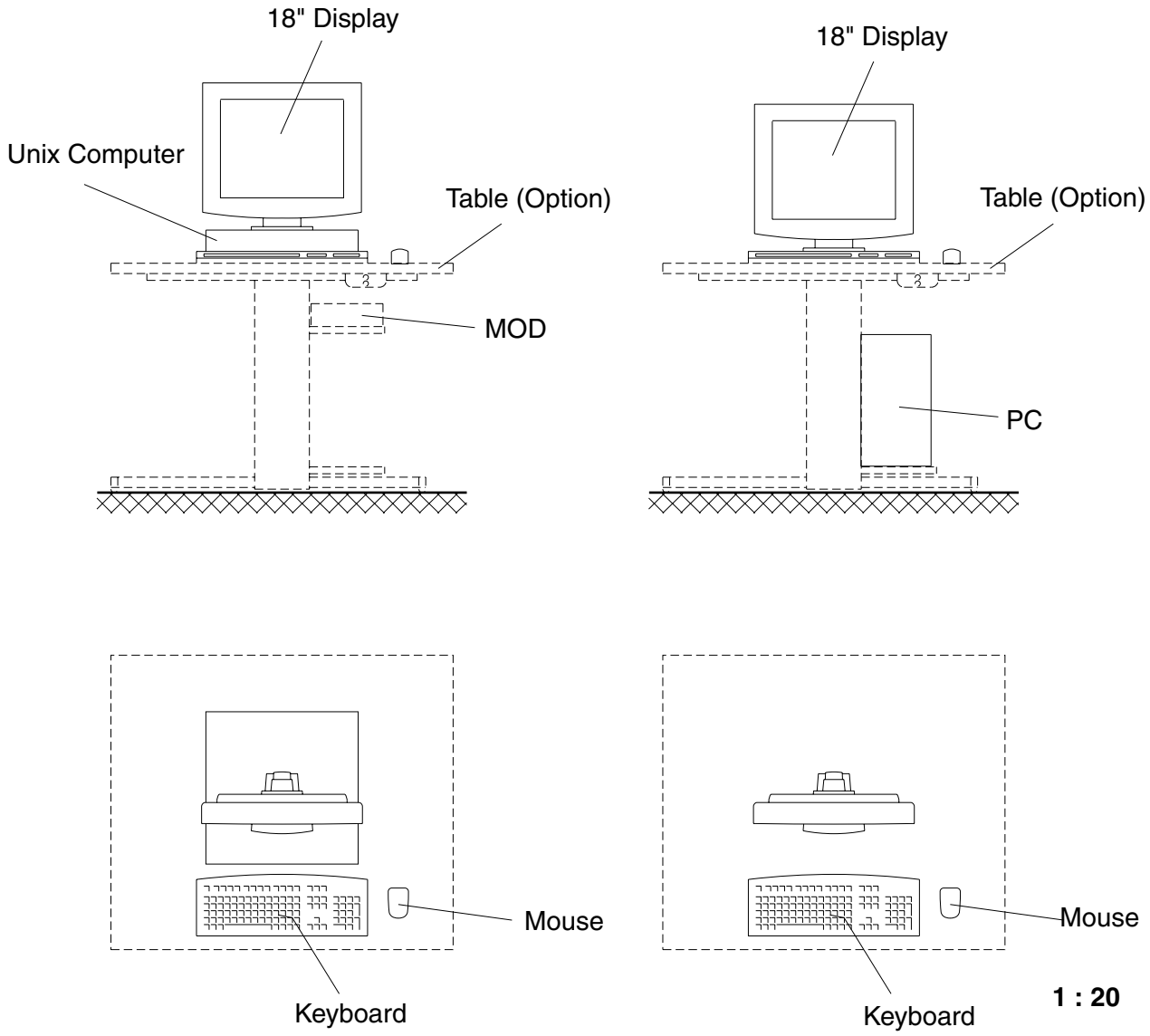
The height of the table for the acquisition workstation can be adjusted using the motor.

NOTE	**If the table (option) for the acquisition workstation is not included in the order, it must be provided by the customer.**

Version 2:
Novation Acquisition Workstation (WH AWS) + Opdima

comprised of: 2 color or 1 color and 18" black/white display, Unix computer, 2 keyboards, 2 x mouse, PC and MOD

NOTE	**The version shown on this planning proposal has not yet been released. This planning proposal becomes valid only if and when this version is released for regular sale. Consult the sales personnel.**



NOTE	**If the table (option) for the acquisition workstation was not included in the order, it must be provided by the customer.**

The height of the table for the acquisition workstation can be adjusted using the motor.

Emergency Breakers

The emergency breakers must be installed according to local regulations, but must not break the power for the wall/outlet/mains socket, dedicated to Opdima workstation.

Power Connection

- The workstation is shipped with a country-specific set of wall plugs.
- The rest of the Opdima is powered internally from the MAMMOMAT stand.

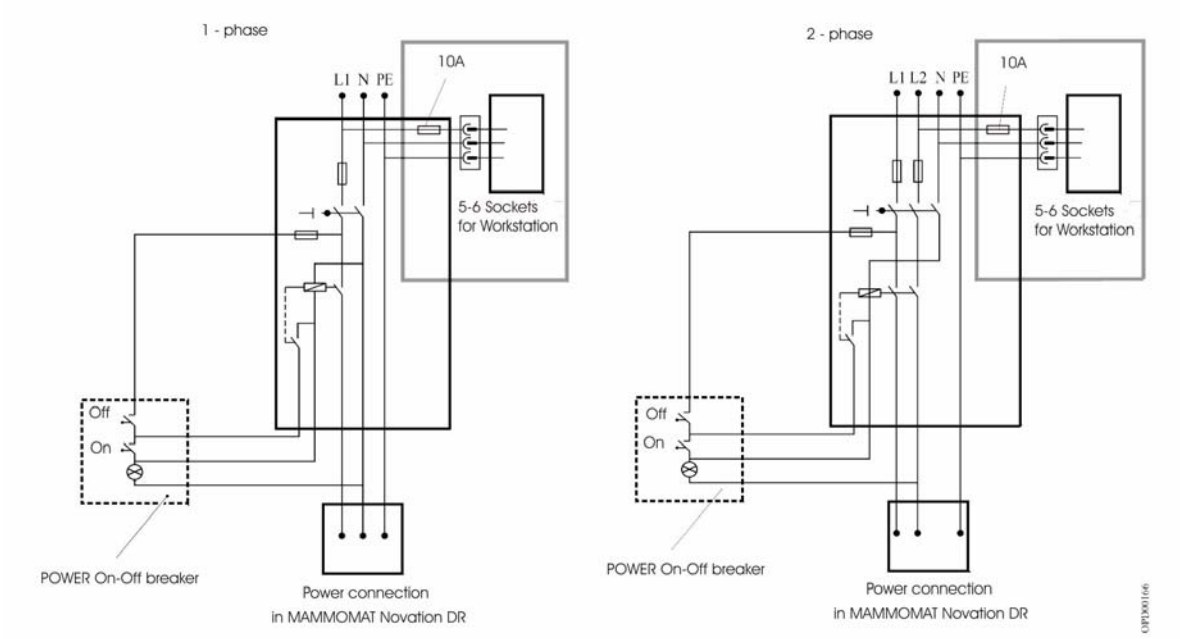
For the WH AWS and for the OPDIMA workstation (as well as for other small electrical appliances, such as: the vertically adjustable desk, the switchbox, the MOD disk drive, etc. ...), a suitable amount of power wall sockets should be provided on site.
The sockets should ideally be located in the vicinity of the desk where these appliances will be installed.

Such a row of sockets (five to six in number) has to be connected to:

1. the same phase as the one the to which the MAMMOMAT Novation DR system is connected if there is a single-phase connection of the Novation.
2. to the same one of the two phases to which the MAMMOMAT Novation DR system is connected if there is a two-phase connection of the Novation.

The phase powering these sockets should be secured by a 10 Amp fuse (max. 16). The socket for OPDIMA WS must be correspondingly labeled, the label is included in the installation kit.

See the schematics below:



NOTE	**A UPS is recommended for the Opdima computer; it must be obtained locally.**

Electrical Data

	Power Line Connection	Cable Lengths	Remark
Opdima computer	1~/2~100, 120, 200-240 V ± 10%, 50/60 Hz	1.5 m	Network interface Ethernet/Fast Ethernet, twisted pair standard (10-BaseT and 100-BaseT), RJ-45 type connector Transfer protocol: TCP/iP from the Solaris system
Opdima table	230 V ± 10%, 50W, 50Hz; EU and Switzerland 110 V ± 10%, 50W, 60Hz; USA 100 V ± 10%, 50W, 60Hz; Japan	2 m	—
CCD camera	30 V DC (from Biopsy controller)	—	internal
Biopsy controller	230 V AC, 1A (only internal power supply from MAMMOMAT *Novation*)	8 m	—
Biopsy unit	5 V DC, 1A (only internal power supply from Biopsy controller)	—	internal
MOD	—	1 m	—
Switchbox	5 V DC	—	Adapter included in shipment

Dimensions, Weights

	Dimensions (W x D x H) [mm]	Weight [kg]
Opdima computer	445 x 97 x 445	approx. 12
Opdima table	1000 x 860 x 670-1070	approx. 75 max. load 80
CCD camera	382 x 194 x 15	approx. 3
Biopsy controller	300 x 120 x 380	approx. 5
Biopsy unit	405 x 370 x 410	approx. 12
MOD	210 x 67 x 300	approx. 4.9
Switchbox	205 x 127 x 48	approx 1.5

Environmental Conditions

Opdima computer	Operation	Transport
Admissible ambient temperature	+ 10° C ... + 35° C	
Admissible rel. humidity (non-condensing)	30% ... 70%	
Admissible air pressure	700 hPa ... 1060 hPa	
CCD camera	10° C ... 40° C	0° C ... 40° C
Computer	10° C ... 35° C	0° C ... 40° C